

## STATE OF SOUTH DAKOTA CLASS SPECIFICATION

**Class Title: Natural Resources Engineering Director**

**Class Code: 40874**

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### **A. Purpose:**

The Natural Resources Engineering Director functions as an engineering expert for a division; or manages a comprehensive engineering program made up of multiple related programs managed individually by other professionals, by setting engineering standards, providing engineering expertise, and authorizing engineering work to ensure continuity of project development and implementation, compliance with engineering and environmental regulations, and protection of public health and the environment.

### **B. Distinguishing Feature:**

Natural Resources Engineering Directors are staff engineers for divisions; or team leaders over other professional positions and manage a statewide engineering program comprised of multiple related programs individually managed by other professionals.

Natural Resources Engineering Specialists manage assigned statewide engineering programs, and provide technical expertise to other engineers and staff.

Natural Resources Administrators administer a natural resources program; and supervise.

### **C. Functions:**

*(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)*

1. Provides professional expertise to the division director and department secretary on engineering issues to facilitate informed decisions on statewide policies and issues.
  - a. Develops engineering design criteria for environmental control facilities and natural resources projects.
  - b. Approves engineering reports and operation and maintenance manuals for environmental control facilities and natural resources projects.
  - c. Approves plans and specifications.
  - d. Develops legislative proposals; and formulates and implements policies.
  - e. Coordinates engineering activities within a division.
  - f. Develops and coordinates contractual agreements between the department and other entities.
  - g. Provides engineering direction in formulating original and innovative techniques to develop and accomplish the state's long-range goals; and to perform research on state, federal and local projects.
  - h. Participates on multi-jurisdictional technical and advisory teams to evaluate and influence the impact of natural resources development in the state.
  - i. Provides technical evaluation of proposed natural resources projects that affect the state.
  - j. Provides comprehensive evaluation of critical issues regarding the state's natural resources, and develops and recommends policy positions and technical procedures to the department secretary and gubernatorial staff.
  - k. Testifies in court as an expert witness.
2. Directs and oversees a statewide comprehensive engineering program by setting program goals, developing protocols and methodologies to achieve program goals, and coordinating as a team leader among program managers to achieve overall program objectives.
  - a. Develops, allocates, and monitors budgets; obtains and administers grants; and determines program missions, tasks, and goals.

- b. Assigns projects and oversees development and implementation of work plans.
- c. Reviews and approves comment letters and reports submitted by professional personnel, and recommends alternatives or enhancements.
- d. Establishes discharge and emission limitations and other permit conditions, and monitors compliance.
- e. Develops enforcement and inspection procedures and directs implementation.
- f. Develops special projects as assigned including research and policy development.
- g. Develops legislation, rules, and regulations applicable to the program.
- h. Assesses engineering deficiencies in the program and recommends corrective procedures.
- i. Interprets rules and regulations for professional staff.
- j. Coordinates program efforts with other areas of the department; other state agencies; local and federal government agencies; and affected groups and individuals.

3. Performs other work as assigned.

#### **D. Reporting Relationships:**

Reports to a Natural Resources Administrator. Does not supervise, but is a team leader and provides work direction and technical expertise to other professional staff.

#### **E. Challenges and Problems:**

Challenged to develop timely and obtainable schedules and coordinate all entities to develop effective long-range strategies and goals. This is challenging because involved entities may be from a wide variety of agencies, other states, local project sponsors, and individuals, whose points of view differ. Further challenged to ensure that engineering and technical components of projects are effective, economically feasible, and environmentally sound.

Problems resolved include overcoming resistance and hostility to proposed projects, working with multi-agency funding packages, ensuring program components are working within funding guidelines, ensuring engineering reviews result in prevention of environmental failures and public health problems, keeping current on applicable rules and regulations, ensuring facilities are technically feasible and environmentally safe and in compliance, and resolving disputes with the regulated community over permit conditions.

#### **F. Decision-making Authority:**

Decisions include whether engineering assessments and reports are adequate, technically correct, and environmentally effective; approval of plans and specifications, construction change orders, addendums, and contractual agreements; project timetables; appropriate design criteria and regulations; approval of final permit conditions; levels of investigations and enforcement actions; eligibility and priority of grant allocations; inspection schedules; the content of presentations and outreach materials; and recommendations for budget, legislative action issues, policies, approval of project budgets and expenditures, reclamation bond amounts and release of reclamation bonds, and approval of permit applications.

Decisions referred include enforcement requiring litigation or policy decisions of state or federal government; legal issues and questions; technical revisions to existing permits; final approval of site closures, requests for additional resources, budget, legislative proposals, policies, project budgets and expenditures, reclamation bond amounts and release of reclamation bonds, and approval of permit applications.

#### **G. Contact with Others:**

Daily contact with municipalities and consultant engineers to provide direction in design requirements and appropriate procedures and regulations; with local project sponsors to discuss field activities, legislative action, and policy changes; with other state and federal agencies to coordinate work and project activities, interpret regulations, review plans of study, and gather data; with the regulated community to interpret regulations; and with permit applicants to discuss current and proposed permits, conditions, and requirements; weekly contact with legislators regarding geohydraulic data, water availability, procedures, and rules; with federal agencies to obtain information on rule changes and interpretation and to process grants; with the Environmental Protection Agency (EPA) to coordinate and discuss compliance and enforcement; with congressional delegation staff to track legislation and policy trends; and with industry environmental managers regarding permits and regulatory requirements; and monthly contact with the Attorney General's staff regarding the legality of regulatory requirements, and sensitive correspondence; and with department boards regarding regulatory changes, permit issuance, and enforcement actions;

#### **H. Working Conditions:**

Works in a typical office environment.

#### **I. Knowledge, Skills, and Abilities:**

Knowledge of:

- federal and state laws and regulations pertaining to the causes and control of pollution;
- department rules, policies and procedures;
- engineering principles and practices as they apply to the control of environmental pollution;
- the systems and theories of effective economic development;
- the principles and techniques of motivating employees and encouraging positive participation in work activities;
- routine personnel matters such as scheduling leave and training and making recommendations for promotions or pay increases;
- progressive discipline procedures and documentation;
- the principles and procedures for supplying expert testimony;
- the principles and techniques of effective public relations and external communications.

Ability to:

- plan, direct, and coordinate the work of professional engineers and scientists;
- plan and organize work activities and prioritize task completion to meet schedules and deadlines;
- delegate assignments to the most appropriate team member;
- communicate expectations and standards of performance to team members and follow up and evaluate work performed;
- provide guidance and motivation to team members in the resolution of problems and achievement of objectives;
- monitor work progress and assist team members in solving problems;
- exercise judgment and discretion when applying and interpreting departmental policies and procedures;
- communicate persuasively and defend a position or decision;
- analyze cause and effect relationships in problems and develop alternative resolutions;
- favorably present and promote departmental priorities, services, and actions internally and externally.